

SERVICE MANUAL

STEREO CASSETTE PLAYER

BASIC TAPE MECHANISM : 4ZM-2 P3NC2

aiwa
S/M Code No. 09-99C-422-9R1

REVISION

SPECIFICATIONS

Maximum output: 4 mW + 4 mW (EIAJ/16 ohm) <Y>
15 mW + 15 mW (EIAJ/32 ohm) <YJ>
Power source: DC 3V using two R6 (size AA) batteries
Maximum dimensions: 116.6 (W) x 92 (H) x 35 (D) mm
(4⁵/₈ x 3⁵/₈ x 1⁷/₁₆ in.)
Weight Approx. 116.8 g (4 oz) (excluding batteries)

- Design and specifications are subject to change without notice.

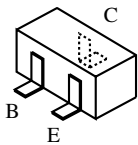
ACCESSORIES / PACKAGE LIST

REF.NO.	PARTNO.	KANRI NO.	DESCRIPTION
1	8A-HG8-901-010	IB, Y (EGFSI) <Y>	
1	8A-HG8-902-010	IB, Y (EDPOHCZ) <Y>	
1	8A-HG8-906-010	IB, YJ (ESC) <YJ>	
2	84-447-019-310	CLIP, BELT	
3	87-B30-168-210	HEADPHONE, HP-M006 (K)	

ELECTRICAL MAIN PARTS LIST

REF.NO.	PARTNO.	KANRI NO.	DESCRIPTION	REF.NO.	PARTNO.	KANRI NO.	DESCRIPTION
IC				C21	87-A11-726-080		C-CAP,S 0.33-16 Z F
	87-A21-387-040	C-IC,TA2145F		C51	87-A11-733-080		C-CAP,S 1-16 Z F
TRANSISTOR				C52	87-A11-733-080		C-CAP,S 1-16 Z F
	87-026-264-080	C-TR,RN1411		C53	87-A10-489-040		CAP,E 220-4 7L SR
	87-026-268-080	C-TR,RN2411		C301	87-A11-559-080		C-CAP,S 3300P-50 K B
	89-327-125-080	C-TR,2SC2712GR		C302	87-A11-559-080		C-CAP,S 3300P-50 K B
DIODE				C303	87-A11-596-080		C-CAP,S 0.068-16 K B
	87-020-027-080	C-DIODE,1SS184		C304	87-A11-596-080		C-CAP,S 0.068-16 K B
MAIN C.B				C305	87-A11-733-080		C-CAP,S 1-16 Z F
C1	87-A11-554-080	C-CAP,S1800P-50<EXCEPT[LM]Y>		C306	87-A11-733-080		C-CAP,S 1-16 Z F
C1	87-A11-556-080	C-CAP,S 2200P-50 KB<[LM]Y>		C307	87-A11-587-080		C-CAP,S 0.039-16 K B
C2	87-A11-554-080	C-CAP,S 1800P-50 K B		C308	87-A11-587-080		C-CAP,S 0.039-16 K B
C2	87-A11-556-080	C-CAP,S 2200P-50 K B		C309	87-A11-560-080		C-CAP,S 3900P-50 K B
C3	87-010-500-040	CAP,E 33-4		C310	87-A11-560-080		C-CAP,S 3900P-50 K B
C4	87-015-675-040	CAP,E 33-6.3 M SRA		C311	87-A11-563-080		C-CAP,S 5600P-50 K B
C5	87-A11-565-080	C-CAP,S 8200P-50 K B		C312	87-A11-563-080		C-CAP,S 5600P-50 K B
C6	87-A11-565-080	C-CAP,S 8200P-50 K B		C313	87-015-676-040		E/CAP 47/6.3
C7	87-A11-551-080	C-CAP,S 1000P-50 K B		C315	87-A11-581-080		C-CAP,S 0.027-16 K B
C8	87-A11-551-080	C-CAP,S 1000P-50 K B		C316	87-A11-581-080		C-CAP,S 0.027-16 K B
C9	87-A11-569-080	C-CAP,S 0.012-50 K B		C317	87-A11-733-080		C-CAP,S 1-16 Z F
C10	87-A11-569-080	C-CAP,S 0.012-50 K B		C318	87-A11-733-080		C-CAP,S 1-16 Z F
C11	87-A11-553-080	C-CAP,S 1500P-50 K B		C319	87-A11-733-080		C-CAP,S 1-16 Z F
C12	87-A11-553-080	C-CAP,S 1500P-50 K B		C320	87-A11-733-080		C-CAP,S 1-16 Z F
C14	87-010-498-040	CAP,E 10-16 GAS		J1	85-HRL-623-010		JACK,3.5 ST BLK
C15	87-A11-718-080	C-CAP,S 0.1-25 Z F		R53	87-A00-530-080		C-RES,S 180-1/10W F
C16	87-A11-733-080	C-CAP,S 1-16 Z F		SFR51	87-024-197-010		SFR,1K H VZ066L3
C17	87-A10-489-040	CAP,E 220-4 7L SR		SW1	87-A90-133-110		SW,LEAF LSA1120JAU
C18	87-A10-489-040	CAP,E 220-4 7L SR		SW2	87-A90-917-010		C-SW,SL 1-1-2 SS-350
C20	87-A11-726-080	C-CAP,S 0.33-16 Z F		VR1	87-A90-981-010		VR,RTRY 20KBX1
				FRONT C.B			
				SW301	87-A91-285-010		C-SW,SL 1-1-4

TRANSISTOR ILLUSTRATION



RN1411
RN2411
2SC2712

○チップ抵抗部品コード／CHIP RESISTOR PART CODE

チップ抵抗部品コードの成り立ち

Chip Resistor Part Coding




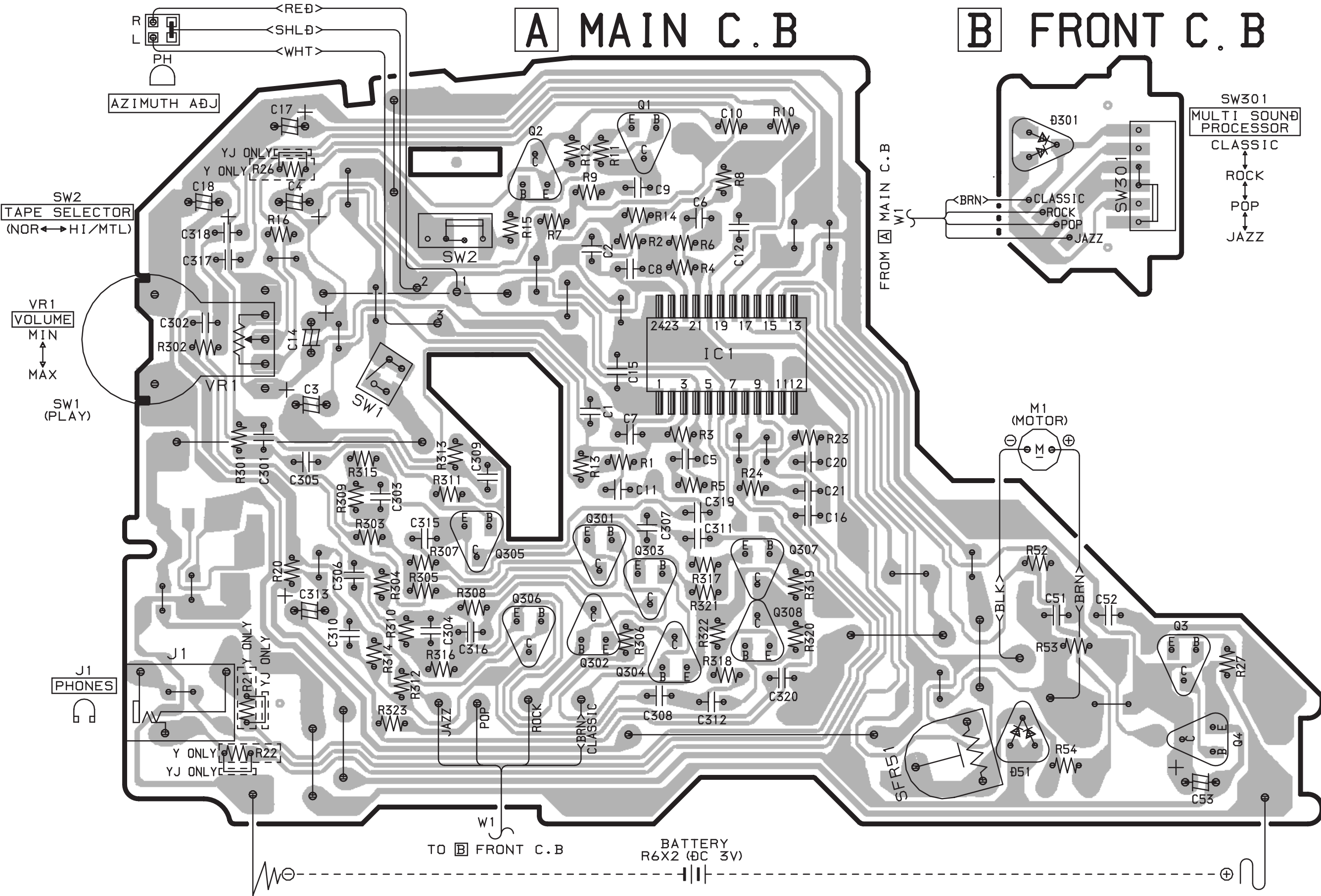
A
抵抗部品コード
Resistor Code

桁表示
Figure

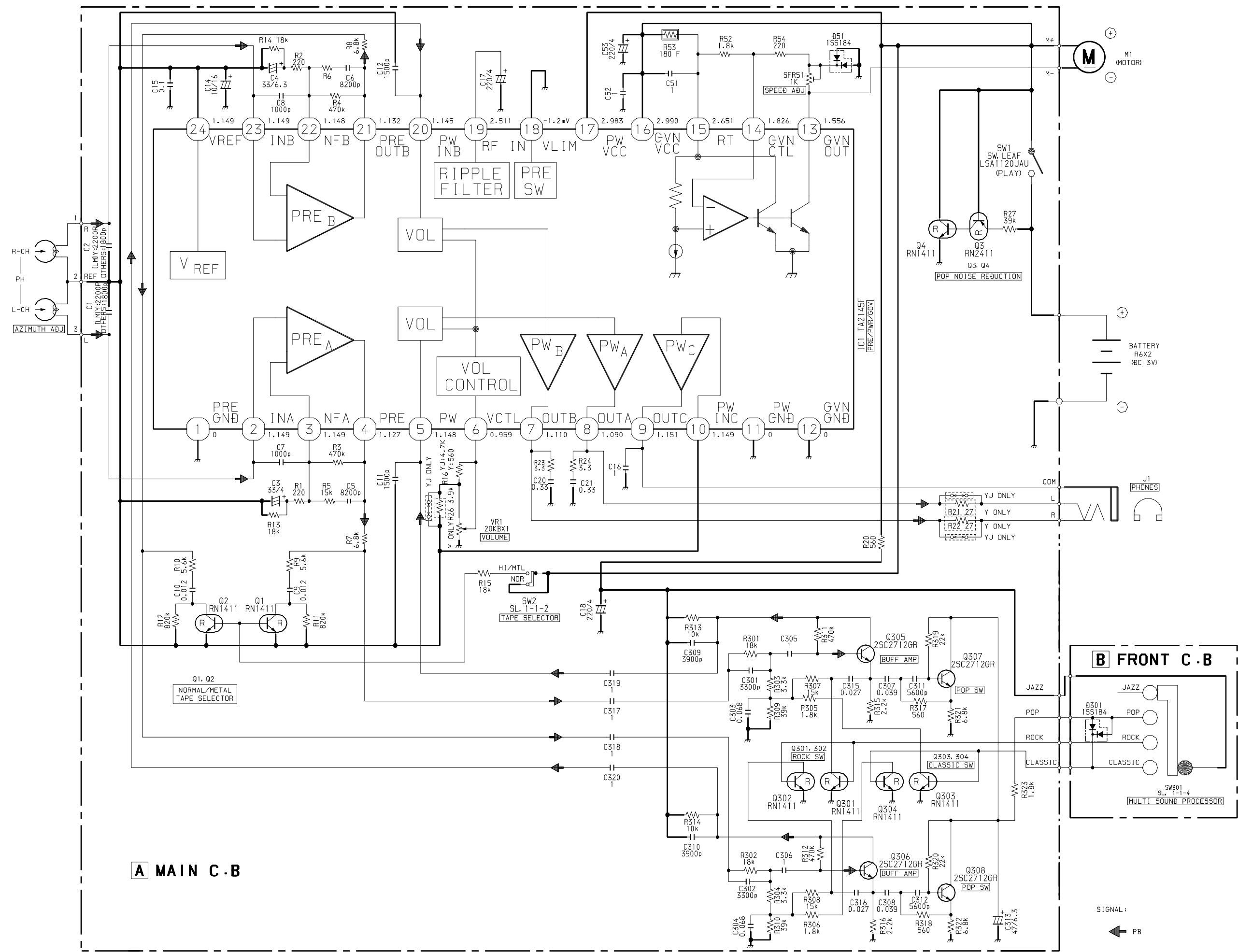
抵抗値
Value of resistor

チップ抵抗
Chip resistor

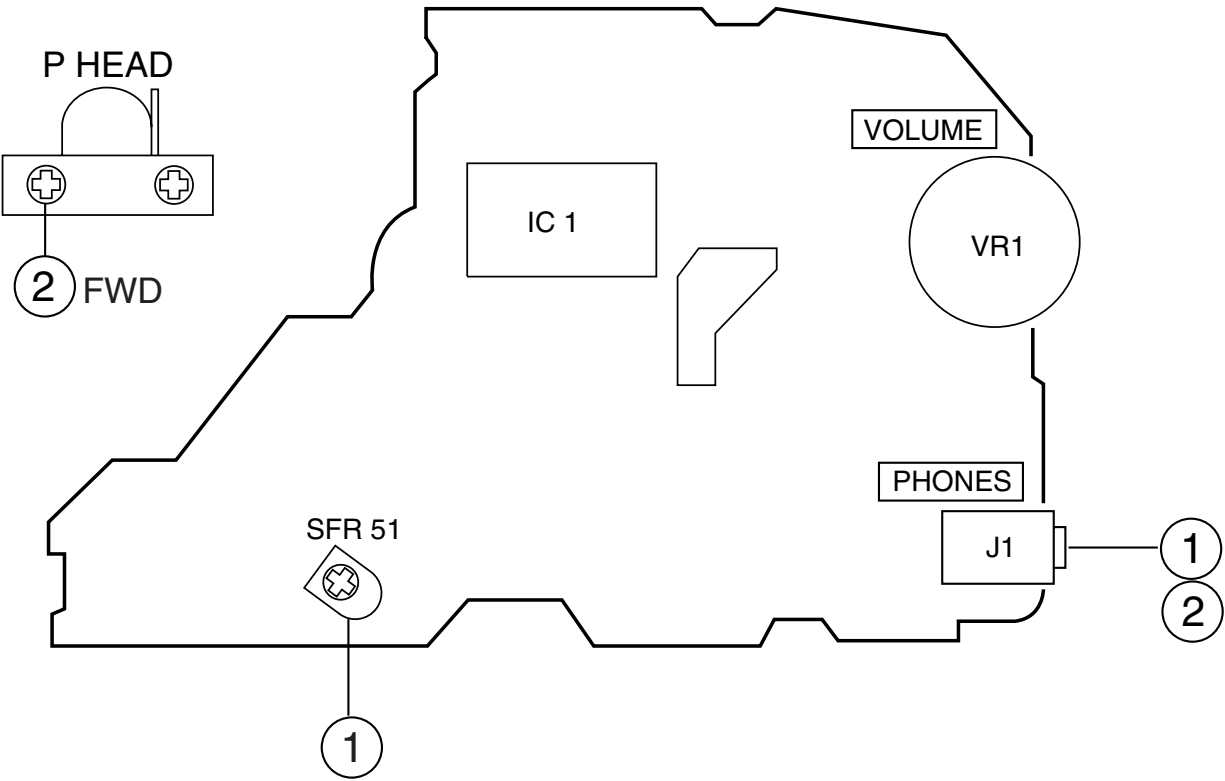
容量 Wattage	種類 Type	許容誤差 Tolerance	記号 Symbol	寸法／Dimensions (mm)				抵抗コード : A
				外形／Form	L	W	t	Resistor Code : A
1/16W	1005	± 5%	CJ		1.0	0.5	0.35	104
1/16W	1608	± 5%	CJ		1.6	0.8	0.45	108
1/10W	2125	± 5%	CJ		2	1.25	0.45	118
1/8W	3216	± 5%	CJ		3.2	1.6	0.55	128



SCHEMATIC DIAGRAM

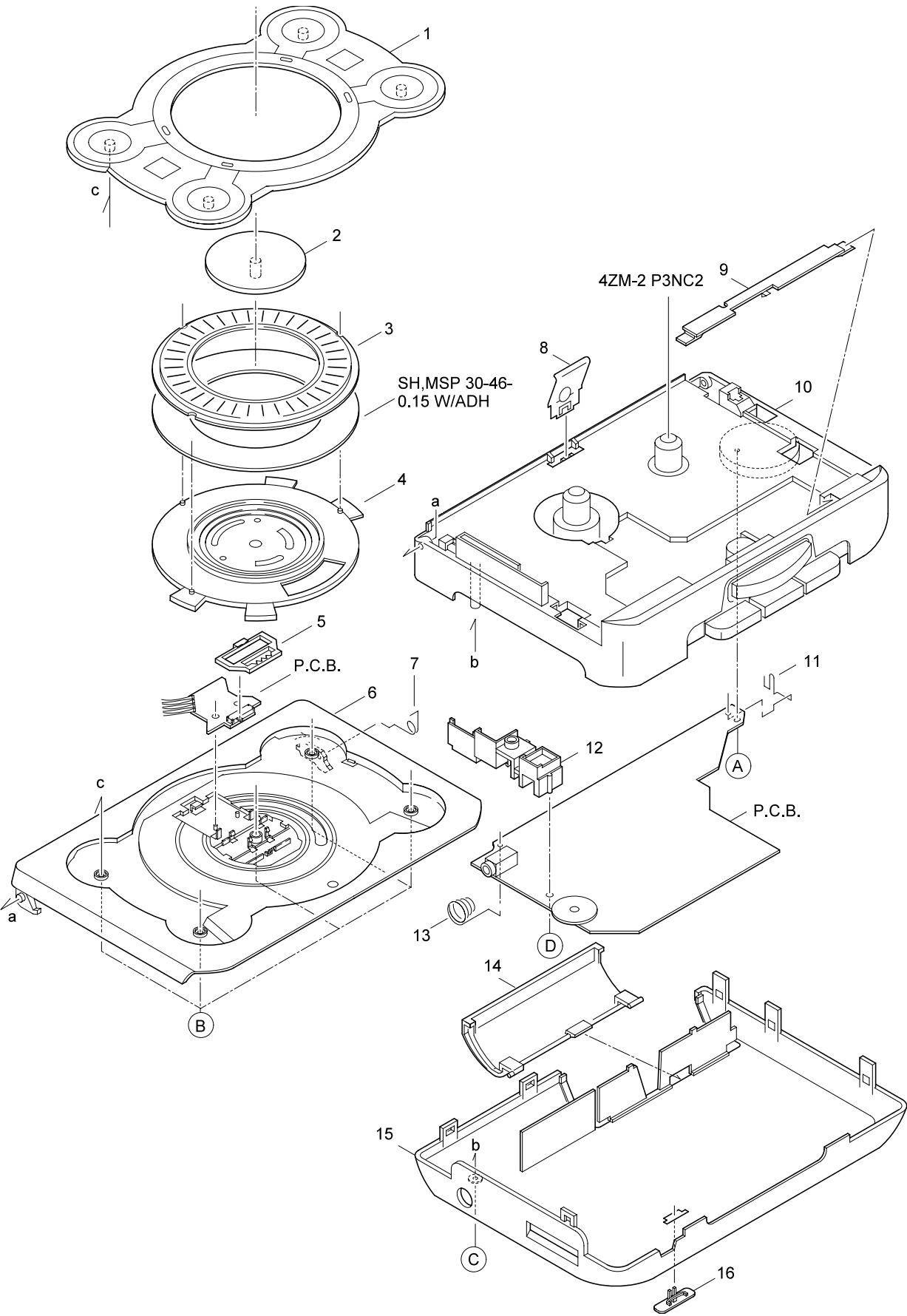


A MAIN C.B



1. Tape Speed Adjustment
- Settings :
- Test tape : TTA – 100 (Tape center)
 - Test point : Phones Jack (J1)
 - Adjustment location : SFR51
 - MSP : CLASSIC
 - Tape selector : NORM
 - Volume : Non – clip (MAX – 10dB)
- Method : Play back the test tape and adjust SFR51 so that the frequency becomes 3000Hz ± 10Hz. Then confirm WOW is less than 0.50%.

2. Azimuth Adjustment
- Setting :
- Test tape : TTA – 330 / TTA – 420
 - MSP : CLASSIC
 - Volume : MAX
 - Tape selector : NORM
 - Adjustment location : Head azimuth adjustment screw
- Method : Play back (FWD) the test tape and adjust screw so that the 8kHz signal output is maximum.



MECHANICAL PARTS LIST 1 / 1

REF.NO. PARTNO. KANRI DESCRIPTION

NO.

1 8A-HG8-002-010 PANEL,MSP
2 8A-HG8-005-010 CAP, MSP
3 8A-HG8-003-010 KNOB,RTRY MSP
4 8A-HG8-004-010 PLATE,INDICATOR
5 8A-HG8-201-010 RACK,MSP

6 8A-HG8-001-010 LID,CASS<[S]YJ>
6 8A-HG8-015-010 LID,CASS Y1 J008N<[S]Y>
6 8A-HG8-016-010 LID,CASS Y1 J274B<[LM]Y>
7 86-HRM-205-010 SPR-T,CLICK
8 8A-HRL-202-010 SPR-P,CASS

9 87-HRR-206-010 PLATE,HEAD J034
10 88-HRJ-038-010 FRAME,CENTER J034
11 86-HKA-202-010 BAT-CONTACT,(+)
12 8Z-HG8-202-010 HLDR,DC JACK
13 8Z-HG8-203-010 BAT,CONTACT(-)

14 8Z-HG8-018-010 LID,BATT J049N<EXCEPT [LM]Y>
14 8A-HG8-021-010 LID,BATT J274B<[LM]Y>
15 8Z-HG8-016-010 CABI,REAR J049N<[S]YJ>
15 8A-HG8-012-010 CABI,REAR Y1 J274B<[LM]Y>
15 8Z-HG8-027-010 CABI,REAR YZ J049N<[S]Y>

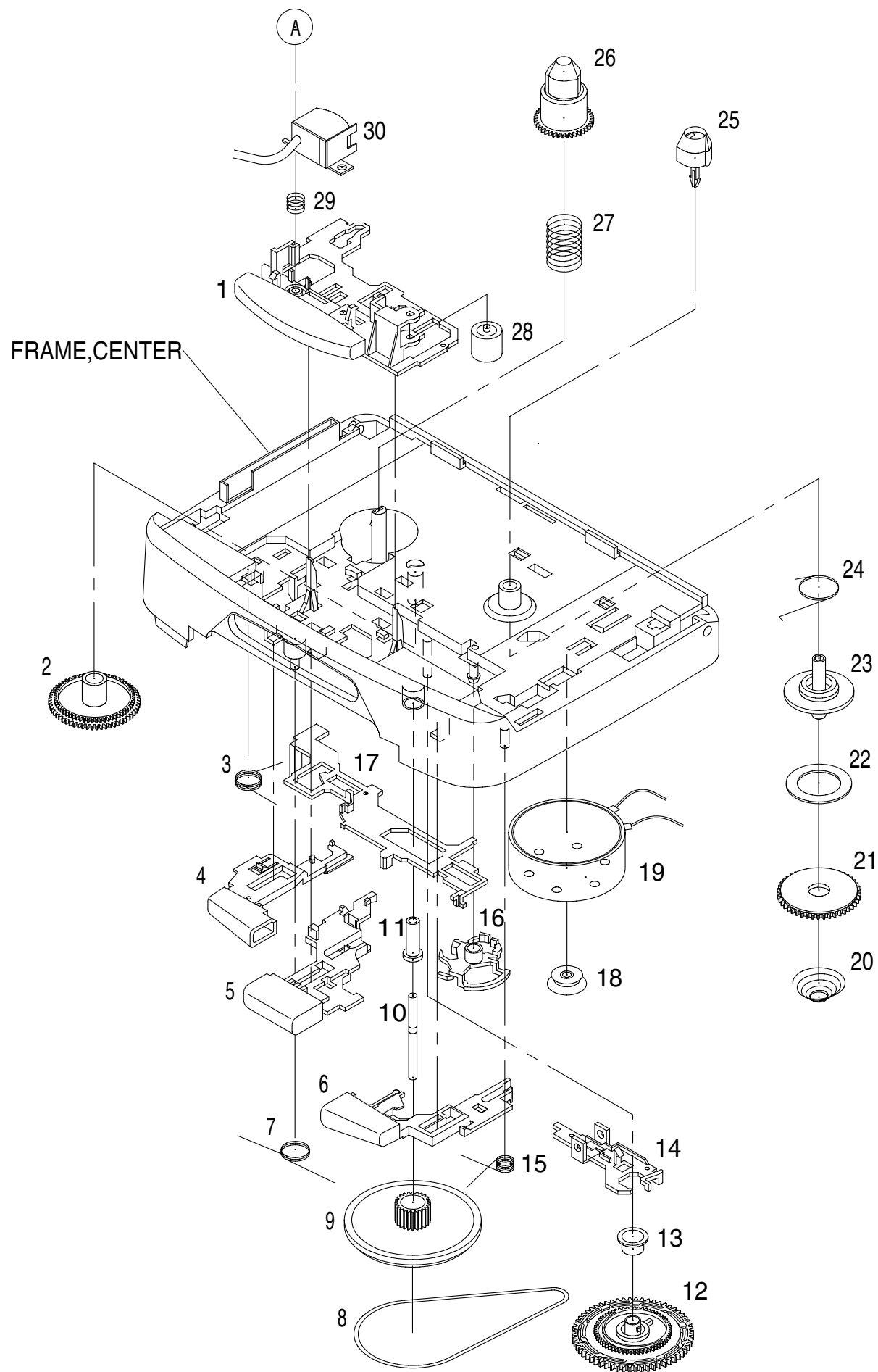
16 8Z-HGA-013-010 KNOB,SL TAPE J<EXCEPT [LM]Y>
16 8A-HG8-031-010 KNOB,SL TAPE J274B<[LM]Y>
A 87-264-525-310 SCREW, V+1.7-2.5
B 87-067-732-010 TAPPING SCREW, VT1.4-3
C 87-067-691-010 SCREW VT+1.7-6

D 87-067-384-010 SCREWVT1.4-3.5HL

COLOR NAME TABLE

Basic color symbol	Color	Basic color symbol	Color	Basic color symbol	Color
B	Black	C	Cream	D	Orange
G	Green	H	Gray	L	Blue
LT	Transparent Blue	N	Gold	P	Pink
R	Red	S	Silver	ST	Titan Silver
T	Brown	V	Violet	W	White
WT	Transparent White	Y	Yellow	YT	Transparent Yellow
LM	Metallic Blue	LL	Light Blue	GT	Transparent Green
LD	Dark Blue	DT	Transparent Orange	GM	Metallic Green
YM	Metallic Yellow				

TAPE MECHANISM EXPLODED VIEW 1 / 1



TAPE MECHANISM PARTS LIST 1 / 1

REF.NO.	PARTNO.	KANRI NO.	DESCRIPTION
1	84-ZM2-012-010		LEVER, PLAY G
2	84-ZM2-211-01K		GEAR, CONNECT
3	84-ZM2-222-010		SPR-T, PLAY
4	84-ZM2-015-010		LEVER, STOP G
5	84-ZM2-014-010		LEVER, REW G
6	84-ZM2-013-010		LEVER, FF G
7	84-ZM2-223-010		SPR-T, REW STOP
8	84-ZM2-232-010		BELT, MAIN
9	84-ZM2-221-010		FLY-WHL, P2
10	84-ZM2-230-010		CAPSTAN, P 1.8-25
11	84-ZM2-220-01K		BRG, P
12	84-ZM2-210-01K		GEAR, AUTO
13	84-ZM2-218-01K		CAP, GEAR AUTO
14	84-ZM2-208-01K		LEVER, SHIFT
15	84-ZM2-224-010		SPR-T, FF LOCK
16	84-ZM2-207-01K		LEVER, AUTO
17	84-ZM2-206-01K		LEVER, LOCK
18	84-ZM2-219-01K		PULLEY, MOTOR
19	87-045-385-019		MOT (BCY3B11)
20	84-ZM2-226-010		SPR-C, CLUTCH
21	84-ZM2-212-01K		GEAR, CLUTCH
22	84-ZM2-231-019		FELT, CLUTCH
23	84-ZM2-217-01K		SHAFT, REEL
24	84-ZM2-225-010		SPR-T, AUTO FIND
25	84-ZM2-216-01K		REEL TABLE, R
26	84-ZM2-215-01K		REEL TABLE, L
27	84-ZM2-228-010		SPR-C, BT
28	84-ZM2-233-110		PINCH ROL ASSY
29	84-ZM2-227-010		SPR-C, AZIMUTH
30	87-A90-272-010		HEAD, PH MS25P ETH
A	84-ZM2-242-019		S-SCREW, AZIMUTH-2-5.9

L ▶

A4 ▶

サービス技術ニュース	
番号	連絡内容
Gー	ー
Gー	ー
Gー	ー